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22 May 1962

MEMORANDUM FOR: Chief, Technical Plans & Development Staff

THROUGH: Acting Chief, Technical Development Branch

SUBJECT: Design Modifications for Model 45 Multimotion Twin 70mm Light Tables

25X1 1. On a visit to [redacted] plant, on 16 May 1962, the undersigned participated in a design conference to finalize the specifications for the subject light table. Twelve of these tables were approved for procurement at a cost of [redacted] at the Technical 25X1 Development Committee meeting of 26 April 1962.

25X1 2. In discussions with [redacted] design engineers, it became apparent that a more versatile instrument could be fabricated at little additional cost without sacrificing any of the desirable features incorporated in the original proposal. In addition, the APEL film 25X1 reel brackets and the [redacted] segmented nylon rollers, now being procured for existing light tables, are superior to the design pro- 25X1 posed [redacted]

3. It, therefore, appears to be in the best interest of the government to incorporate the design changes tabulated in paragraph 4 in the contract before it is tendered to the vendor. This will, undoubtedly, result in a reduction in price for each instrument since the superior APEL brackets and [redacted] rollers can be 25X1 furnished and installed by the government at considerably less 25X1 cost than [redacted] could procure or design like-quality hardware.

4. Statement of work to be performed by vendor.

a. Design and fabricate a light table suitable for mounting the following government furnished equipment: 25X1 A standard [redacted] stand (cat. # 31-26-95, without base), 360° rotatable arm (cat. # 31-26-90) and Zoom power pod (cat. # 53-70-02, Model 2), APEL film reel brackets 25X1 and [redacted] segmented nylon rollers.

b. Provide a slide between the table and the [redacted] 25X1 stand to allow the microscope to be quickly positioned over the viewing area of the light box.

c. Provide a transverse feed screw and slide to move the light box in relation to the microscope a minimum of 1½"

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Declass Review by NGA.

each side of the table centerline.

d. Provide a rotational movement of the whole light table on its base and tilting mechanism a minimum of 90° in each direction from the nominal position.

e. Provide a tilting mechanism with integral braking safety device to allow tilting the light table and microscope through a minimum range of 0° to 45° of inclination toward operator.

f. Provide a light table with at least 9½" on a side of lighted surface but no more than 11½" on a side. The viewing surface of the table is to be glass with an opalescent plastic diffuser immediately beneath the glass surface.

g. The design goal for table lighting should be sufficient to view transparencies with 2.0 density comfortably through a standard Zoom microscope pod at 60X magnification. Switches or voltage regulation devices are to be provided for at least 4 levels of illumination over the entire viewing surface and at least 2 levels in each of the four quadrants of the viewing surface.

h. Provide mounting arrangements and necessary hardware to mount government furnished accessory equipment, listed in paragraph 4(a) on the light table at the customer's facility.

i. Height of the table and over-all dimensions of the base are to be held to a minimum commensurate with good engineering design and proper balance in all possible positions expected in an operational environment.

j. Engineering and fabrication costs are to be prorated over 12 units.

k. Contract should state that the unit price shall be [redacted] or less, taking into consideration the reduction in complexity of the instrument without film reel brackets and film guide rollers. 25X1

5. One set of APEL brackets and two sets of [redacted] nylon rollers are to be shipped to vendor about 10 June 1962, for fitting on the prototype instrument. Ten sets of APEL brackets at [redacted] each should be added to the existing NPIC contract with [redacted] for installation on the subject tables. The Army Detachment [redacted] has indicated no additional APEL brackets are required for the two tables consigned to Army. 25X1 25X1 25X1 25X1 25X1

[redacted] 25X1

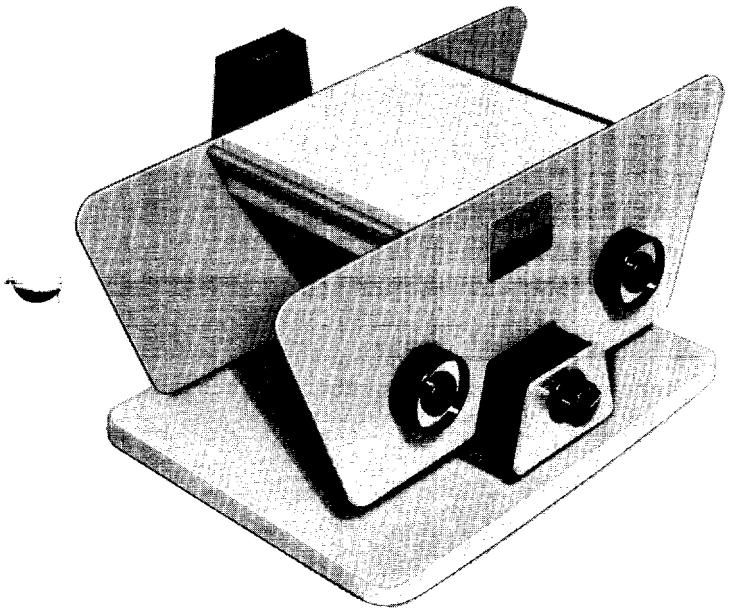
25X1 NPIC/TPSDS/TDB:WGM:df [redacted]

25X1

[redacted] MODEL 45 DUAL-PATH STEREO VIEWER

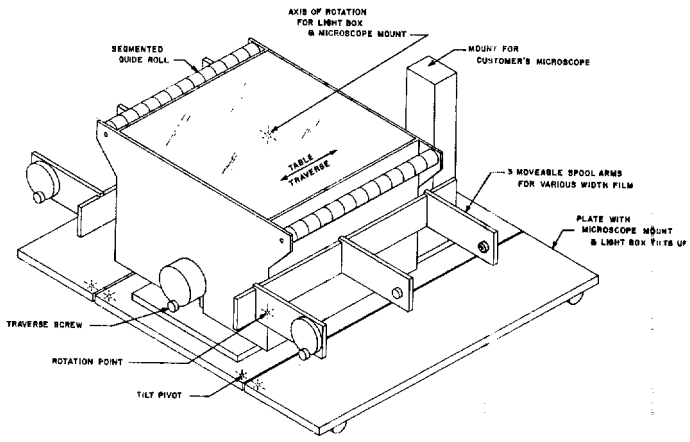
25X1

[redacted] Model 45 Dual-Path Stereo Viewer is a compact, desk top viewing instrument for examination of aerial, missile instrumentation and research photography. It is available in two versions. The large version (#1) will accommodate two paths of 70-mm or 5-inch film, or a single path of 9-inch film. The small version (#2) will accommodate twin paths of 70-mm or a single path of 5-inch film. Both versions include: cross-slide adjustment for stereo microscopic viewing; rotation of viewing plane through ±90°; tilting of viewing plane 20° forward regardless of rotation of plane; and built-in film tension.



◁ VERSION #1

VERSION #2 ▽



SPECIFICATIONS

DIMENSIONS	Version #1 — 16 x 14 x 17 inches Version #2 — 12 x 10 x 17 inches
WEIGHT	Version #1 — 35 pounds Version #2 — 25 pounds
VIEWING AREA	Version #1 — 10 x 10 inches Version #2 — 7¼ x 7¼ inches
FILM CAPACITY	Version #1 — up to 1000 feet Version #2 — 100 feet
LIGHT SOURCE	Multiple fluorescent tubes, variable intensity

25X1

[redacted]